



UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

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GENERAL GOVERNMENT
DIVISION

SEP 16 1982

Mr. Harold D. Henson
Acting Director
Department of General Services



Dear Mr. Henson:

Subject: Procurement Costs of Ammunition Used for
Practice and Training Can Be Reduced
(GAO/GGD-82-87)

This report concerns the District of Columbia's Department of General Services formally advertised, fixed price, small arms ammunition contracts numbered 0300-AA-13-I-2-MR and 0226-AA-13-0-2-MR. These contracts fulfill the Metropolitan Police Department's and the Department of Corrections' ammunition requirements. The 1982 contracts for new ammunition were valued at about \$218,500. However, if the District purchased quality reloaded ammunition for training and practice, it could save about \$43,000 annually. Additional savings should result from combining both agencies' ammunition requirements under one solicitation.

OBJECTIVE, SCOPE, AND METHODOLOGY

This assignment was done in accordance with GAO's "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions." We reviewed the District's small arms ammunition contracts for 1982 as a follow-on to work performed on small arms ammunition contracts at the Departments of Justice and Treasury. We discussed the contracts with the District Department of General Services procurement personnel and firearms and ammunition experts. We also interviewed Federal, State, and local law enforcement personnel; officials in private industry involved with the manufacturing of ammunition; and staff at industry associations.

SAVINGS CAN BE REALIZED IF
RELOADED AMMUNITION IS USED

The Department of General Services is currently purchasing only new ammunition. However, the Department could save the District about \$43,000 each year if it purchased quality reloaded ammunition for training and practice instead of new ammunition. These savings would be realized without any adverse effect on the training program standards and at the same time the District would be using safe, reliable, and accurate ammunition.

Reloaded ammunition is produced on the same machines using the same process and, except for the cartridge case, with the same new components as new ammunition. Loading ammunition is the

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assembly of these various components--brass case, bullet, primer, and powder. In reloaded ammunition, a used cartridge case without defects is remanufactured to original specifications.

On the basis of the Department of Corrections and the Police Department's needs, the District's Department of General Services awards small arms ammunition contracts each year. The ammunition is for practice, training, and regular service use. For 1982, 5 contracts for Police Department ammunition were awarded to the Federal Cartridge Corporation, Federal Laboratories, Remington Arms Company, Continental Suppliers, and Armament Services. One contract for Department of Corrections' ammunition was awarded to Armament Services.

The District's primary training and practice ammunition is the .38 Special, 148 grain wadcutter cartridge. In 1982, the District Police Department paid \$89 per 1,000 new rounds, and the Department of Corrections paid \$162.98 per 1,000 new rounds for this type of ammunition. The net cost to the District is reduced by the sale of the used cartridge case, which the District has been selling for about \$17 per 1,000.

The prices the two Departments paid for the ammunition differ significantly because the Department of Corrections' award was made under the District's Minority Contracting Program (which restricts bidding to minority businesses) and the Police Department's award was not. The requirements of the Police Department were also initially restricted to minority businesses, but because the bids submitted by two minority firms on new solicitations were considered excessive, the contract was readvertised in the open market.

The District estimates that, in fiscal year 1982, 1.7 million rounds of this particular load will be used. This same load can be purchased for about \$50 per 1,000 rounds for reloaded ammunition. The \$50 price includes the cost of returning the cartridge cases to the reload manufacturer. On the basis of the estimated quantity the District plans to use, savings of about \$43,000 could be realized if it purchased reloaded ammunition instead of new ammunition for training and practice. Additional savings should result from combining the Police Department and the Department of Corrections ammunition requirements under one solicitation.

EXPERTS DISAGREE ON USE OF RELOADED AMMUNITION

Firearms and ammunition experts disagree on the use of reloaded ammunition. Some experts feel there are potential problems and dangers associated with reloaded ammunition. Others, on the other hand, believe reloaded ammunition is safe to use for practice and training, does not present any more problems than new ammunition, and offers substantial cost savings as well.

Those firearms and ammunition experts who do not want to use reloaded ammunition state that poorly seated primers, improper powder charges, excessive smoke, oversized bullets, and damaged weapons are common problems with reloaded ammunition. They stated further that production lots containing problem ammunition could not be identified for return to the manufacturers for replacement. They also believe that reloaded ammunition would not meet the Sporting Arms and Ammunition Manufacturers Institute (SAAMI) specifications. These officials were also concerned that reloaded cartridges with cracked cases would cause injuries to shooters.

Other firearms and ammunition experts, however, stated that reloaded ammunition is as good as new ammunition. They believe that poorly seated primers, improper powder charges, excessive smoke, and oversized bullets are just as likely to occur with new ammunition as with reloaded ammunition. The manufacturing process, machines, and components are the same except for the cartridge case. Excessive smoke is caused by the type of powder and bullet lubricant and can be reduced by specifying components in the contract specifications. These officials stated that reloaded ammunition could be identified by production lots and that a remanufactured cartridge would meet all SAAMI specifications. They said that cracked cases are eliminated during the reloading process. They added that even if a case cracks during firing, the shooter would not be injured and the firearm would not be damaged.

FEDERAL, STATE, AND LOCAL
LAW ENFORCEMENT AGENCIES
SUCCESSFULLY USE RELOADS

Many law enforcement agencies have used reloaded ammunition without significant problems. We observed law enforcement agency personnel at the Federal, State, and local levels firing reloaded ammunition for annual qualification purposes and there were no incidences of the above-mentioned problems. These agencies have been using reloaded ammunition for many years without any injury to personnel or damage to weapons.

We interviewed representatives of 29 Federal, State, and local law enforcement agencies regarding their use of ammunition. These law enforcement agencies train hundreds of people who fire thousands of rounds of ammunition each year, and many of these agencies have successfully used reloaded ammunition for years. Specifically, officials at 20 law enforcement agencies (69 percent) believe reloaded ammunition is suitable for training and practice, is not dangerous, and does not adversely affect the training program. In addition, these officials stated that the reloaded ammunition used in their training programs had not caused weapon damage. The remaining nine agencies do not use reloaded ammunition because they prefer new ammunition.

CONCLUSIONS AND RECOMMENDATIONS

If the District of Columbia used reloaded ammunition for training and practice, it could save money without adversely affecting the training program.

The key to successful use of reloaded ammunition is quality control. If the same standards are required for reloaded ammunition as are required for new ammunition, there is no reason for there to be more problems with reloaded ammunition--such as misfires, jamming, or lead deposits in the barrel--than with new ammunition. As with new ammunition, the District can specify the type of bullet, powder, and primer to be used in reloaded ammunition. This would insure quality performance without restricting competition or incurring excessive costs.

We recommend that the District's Department of General Services procure reloaded ammunition for training and practice. The Department of General Services should work with the Firearms Technical staffs at the Metropolitan Police Department and the Department of Corrections to develop specifications for reloaded ammunition. Proper specifications will allow the procurement of safe, reliable, and accurate reloaded ammunition without restricting competition.

We also recommend that the Department of General Services combine the ammunition requirements of the Police Department and the Department of Corrections under one solicitation rather than buying separately for each District agency. Because the Department would be making larger purchases of ammunition under one contract, it could receive a quantity discount and thus achieve additional savings.

AGENCY COMMENTS AND OUR EVALUATION

Officials from the Metropolitan Police Department, the Department of Corrections and the Department of General Services do not agree that the District should be using reloaded ammunition. These officials believe that the quality of reloaded ammunition is inferior and presents a serious potential safety hazard which would offset any potential savings. These officials also stated that firearms manufacturers void warranties on weapons if re-loads are used.

The District has never used commercially reloaded ammunition for practice and training and the potential safety problems cited are associated with all ammunition. The Federal, State, and local agencies using reloaded ammunition that we contacted are not experiencing problems different from or more frequently than those agencies using new ammunition. With regard to the voiding of warranties, a major manufacturer of weapons used by the Department of Justice told us that they do not void warranties if any weapons

were actually damaged due to the use of reloaded ammunition and we doubt whether this is a significant point.

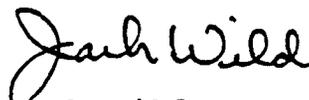
In our judgement, the District's comments fail to take into account that there are reputable manufacturers producing quality reloaded ammunition at substantial savings.

The Department of General Services concurs with the recommendation regarding the combining under one solicitation the ammunition requirements of the Police Department and the Department of Corrections.

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Copies of this report are being sent to the Mayor, the Council of the District of Columbia, the District of Columbia Auditor, and the Inspector General of the District of Columbia.

Sincerely yours,



Jack Wild
Group Director